



NEWS RELEASE

U.S. ARMY CORPS OF ENGINEERS

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Afghanistan Engineer District—North

Aug. 21, 2011

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Corps of Engineers ship hard-to-acquire sheet metal to Afghanistan

KABUL – U.S. Army Corps of Engineers project management specialist Autumn Rodden, of Monroeville, Pa., and a team of colleagues squirreled around rolls of sheet metal in six large cargo containers at a heavily fortified and guarded storage yard on Aug. 15.



U.S. Army Corps of Engineers employees Ron Schroeder (left), Mickey Hegarty (center) and Autumn Rodden inspect coils of steel inside a shipping container at a Kabul storage yard on Aug. 15. Photo by Paul Giblin, U.S. Army Corps of Engineers.

The truck-sized cargo containers were the latest of 89 that have been shipped from the United States since April as part of a new program by the Corps of Engineers to purchase and stockpile hard-to-acquire sheet metal.

The material is a key component for arched-roof buildings, which are used for barracks, office buildings and storage facilities at Afghan military bases scattered across the northern portion of the country. The steel is used for the outer skin of the structures, which are suited to withstand the heat and blowing sand in Afghanistan.

Rodden, construction control representative Mickey Hegarty and civil engineering technician Ron Schroeder, among others, counted and logged the

rolls of steel at the Kabul storage yard and checked for any damage that might have occurred to the material during shipping.

“We found some crushed dunnage. That’s about normal,” Hegarty said, referring to the wooden support structures that are used to secure the rolls within the shipping containers. With possible exception to one roll of steel, the material arrived in the same condition it was when it left Pennsylvania weeks earlier.

That marked an important achievement. Each roll weighs approximately 3,500 pounds, which is about the same weight as a new Volkswagen Beetle. Overall, the Corps of Engineers expects to order \$18 million worth of steel for construction in northern Afghanistan this fiscal year. The program in southern Afghanistan is somewhat smaller.



Coiled steel is used in the construction of arched-roof buildings, which are also known as K-spans, at Afghanistan National Army bases, such as Gamberi Garrison in eastern Afghanistan. Photo by Paul Giblin, U.S. Army Corps of Engineers.

The agency is making the material available to Afghan construction companies that build structures at Afghanistan National Army bases. The emerging Afghan military force is essential for Afghanistan to provide its own security against the Taliban and other insurgents, allowing U.S. and other coalition forces to withdraw.

The Corps of Engineers operates two districts in the country – Afghanistan Engineer District-North, which is based in Kabul; and Afghanistan Engineer District-South, which is based in Kandahar. The southern district has rolled out a similar program.

Before the agency launched the government-furnished materials program, contractors often spent several frustrating months obtaining high-quality steel from foreign suppliers and shipping it to Afghanistan, a land-locked country in southern Asia.

Using regional steel suppliers isn't a viable option, because there's more demand for the steel than manufacturers in Afghanistan and surrounding countries are able to produce, said Eric Eldridge, who served as the Corps of Engineers' program manager for the Afghan army and police construction programs until mid August, when he returned to the United States.

It made sense for the agency to take on the responsibility of providing steel, since it oversees construction at Afghan army bases, said Eldridge, who lives in Centreville, Va., and serves as the Fort Worth District's liaison to the U.S. Customs and Border Protection Agency in Washington, D.C.

The Corps of Engineers orders the material through the Defense Logistics Agency, which purchases it from U.S. suppliers that ship it nearly 7,000 miles from metropolitan Philadelphia to Kabul, a passage that typically takes 90 to 100 days.

The steel is routed overseas to Turkey, Georgia, Pakistan or elsewhere in Asia or Europe, where eventually it's loaded onto trucks for the long haul into Afghanistan, a country that lacks a reliable rail system.

The material is used widely in Afghanistan. This year's orders represent just three projects; 24 projects are lined up for next year, said Rodden, who works as a biologist in the Pittsburgh District back in the United States.

The government-furnished materials program is intended to overcome delays that are caused by backlogs at manufacturing plants, customs issues at international borders, and by terrorism and criminal activity along Afghanistan's roads, Eldridge said.

Contractors no longer will have to wait for individual shipments of steel to arrive; they can use the steel that the Corps of Engineers previously has had delivered. Afghan construction companies merely have to transport the steel from the storage yard to their individual job sites.

The sheet metal is shaped at construction sites with devices called coil-bending machines or curved-roof forming machines. "The contractor will use a machine to bend the coils at a specific arch, depending on the width of the building. Then they seam them together and create the building," Eldridge said.

The width of a building can be altered by adjusting the arch, and the length can be modified by the number of panels that are seamed together.

Steel arched-roof structures are appropriate for Afghanistan because they're economical, relatively easy to build and nearly weather proof, Eldridge said. The round-topped buildings can be outfitted with air conditioning and heating systems, and can be customized for a variety of purposes ranging from housing to vehicle workshops and more.

The Corps of Engineers provides the steel to contractors in Afghanistan at no cost. A key feature to the program is that Corps of Engineers personnel keep a close accounting of the steel used by contractors to ensure that any excess is returned rather than resold on the secondary market, Rodden said.

The cost of the program is negligible in comparison to the financial outlay the Corps of Engineers would have paid contractors to acquire steel on their own, Eldridge said. The advantage is that high-quality steel is available when needed.

Officials considered expanding the program to include other items, such as generators, transformers, doors and windows, but found that those items to be in ample supply in Afghanistan in recent months, Eldridge said.

In the United States, Hegarty serves as a civil engineering technician in the New York District; he lives in Boonton, N.J. Schroeder serves in the same capacity at the Seattle District; he lives in Federal Way, Wash.